

parallel to said substrate, a conductive wall filling said groove in each of said first and second interlayer insulation films and extending from a bottom principal surface thereof to a top principal surface thereof; and a conductive pattern making a contact with a top part of said conductive wall and having a principal surface coincident to said top principal surface of said interlayer insulation film, said conductive wall changing a direction thereof repeatedly and alternately in one of a triangular wave pattern and a rectangular wave pattern in said plane in correspondence to said guard ring pattern,

E' said conductive wall in said first interlayer insulation film being offset with respect to said conductive wall in said second interlayer insulation film in a direction parallel to a principal surface of said substrate when viewed in a direction perpendicular to said principal surface of said substrate,

and wherein said interlayer insulation films comprise a first insulation film that supports said conductive wall laterally and a second insulation film that supports said conductive pattern laterally,

said conductive wall and conductive pattern comprising Cu,

said conductive pattern and said second insulation film having coplanar top principal surfaces,

a bottom edge of said conductive wall making an intimate contact with said top principal surface of said conductive pattern, and

said conductive pattern and said second insulation film located at a top part of said multilayer interconnection structure being covered continuously with an insulation film.

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